

ACCESSION NR: AT4013934

tubular specimen of technically pure copper (outer diam. 3.9 mm, inner diam. 2.7 mm, length 60 mm) at a constant temperature of 230C and constant load σ . The results of the test are shown in Fig. 1 of the Enclosure and the creep rate is shown in Fig. 2 of the Enclosure. The semilog curves in Fig. 2 intersect at one point, signifying that the initial creep rate is independent of the number of cycles. On the basis of these tests it was found that the probability of dislocation delay increases constantly with an increasing number of cycles, thus indicating an increase in the total area of obstacles. The Akulov theory thus makes possible an evaluation of dislocation motion and its relationship to the obstacles encountered during motion. Finally, relaxation creep was studied after removing the load, and was found to be higher for cylindrical specimens than for tubular ones. Orig. art. has: 3 figures and 1 formula.

ASSOCIATION: Institut metallurgii AN SSSR (Institute of Metallurgy)

SUBMITTED: 00

DATE ACQ: 27Feb64

ENCL: 02

SUB CODE: ML

NO REF SOV: 001

OTHER: 000

Card 2/4

ACCESSION NR: AP4040922

S/0250/64/008/005/0296/0299

AUTHOR: Bartashevich, R. A.

TITLE: Application of Akulov statistical dislocation theory to stress relaxation and creep studies (presented by N. S. Akulov, Academician, AN BSSR)

SOURCE: AN BSSR. Doklady*, v. 8, no. 5, 1964, 296-299

TOPIC TAGS: dislocation theory, plastic flow, stress relaxation, creep rate, torsional test

ABSTRACT: From Akulov's law for plastic flow in metals (Dislokatsii i plastichnost', Izd. AN BSSR, 1961) expressions were derived for stress relaxation rate $\dot{\sigma}$ =

$$\dot{\sigma} = -A \operatorname{sh} \frac{B(\sigma - \sigma_k)}{RT},$$

and creep rate $\dot{\epsilon}_0$,

$$\dot{\epsilon} = \dot{\epsilon}_m + (\dot{\epsilon}_0 - \dot{\epsilon}_m) e^{-\beta t},$$

$$\dot{\epsilon}_0 = n_0 e^{-\frac{\sigma}{RT}} \operatorname{sh} \frac{B(\sigma - \sigma_k)}{RT}; \quad \dot{\epsilon}_m = \dot{\epsilon}_0 \frac{n_m}{n_0}.$$

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ACCESSION NR: AP4040922

where

$$A = E [n_\infty + (n_0 - n_\infty) e^{-\frac{q}{RT}}] e^{-\frac{q}{RT}}$$

To verify these two relations, experiments were performed on tubular copper specimens, using torsional tests for creep determination. σ versus ϵ curves at temperatures $T = 293K$ and $T = 379K$ showed good quantitative agreements with the above predictions, except for the tail ends of the curves where stress relaxation rates were very small. The creep tests at temperatures $T = 295, 341, 383, 425, 463$, and $513K$ also showed excellent agreement with the theoretical predictions given above. Orig. art. has: 7 formulas and 2 figures.

ASSOCIATION: Fiziko-mekhnicheskiy institut AN BSSR (Institute of Physics and Mechanics, AN BSSR)

SUBMITTED: 06Jun63

ENCL: 00

SUB CODE: MM

NO REF SOV: 005

OTHER: 000

Card 2/2

CHERNOBIL'SKIY, I. I. [Chornobyl's'kyi, I. I.], doktor tekhn. nauk;
BARTASHEVICH, V. I.

New vibrating conveyor units for loose materials. Khim. prom.
[Ukr.] no.1:64-67 Ja-Mr '62. (MIRA 15:10)

1. Kiyevskiy politekhnicheskiy institut.

(Conveying machinery)

L 25424-66 EWT(m)/T/EWP(w)/EWP(t) JH/JD
ACC NR: AP6010495 SOURCE CODE: UR/0201/65/000/003/0067/0071

AUTHOR: Bartashevich, R. A.

ORG: none

TITLE: An investigation of the kinetics of metal creep during the transition stage at different temperatures

18

SOURCE: AN BSSR. Vestsii. Seryya fizika-tehnichnykh navuk, no. 3, 1965, 67-71

TOPIC TAGS: creep mechanism, copper, aluminum, lead, phase transition, crystal dislocation phenomenon, temperature dependence

ABSTRACT: The author carried a systematic investigation of creep during the transition stage of copper, aluminum, and lead, as a function of the test temperature. It was found that in all investigated metals the creep satisfies the formula $\epsilon = c_1(t + c_2)^{-m}$, and that the plot of m against the temperature was analogous for all investigated metals: m decreased with increasing temperature but retained nearly

Card 1/2

L 25424-66

ACC NR: AP6010495

constant values, namely 1, $2/3$, and $1/2$, within definite temperature ranges. In the case of aluminum, the limits T_1 and T_2 of the temperature range in which $1 > m > 2/3$ is practically independent of the degree of purity, and the temperature T_3 at which $m = 1/2$ first appears, decreases rapidly with increasing impurity concentration. The results, when taken in conjunction with earlier work by V. A. Pavlov et al. (FMM v. 14, 275, 1962 and v. 12, 97, 1961) show that thermal excitation plays the main role with respect to dislocation mobility under creep conditions when $T < T_2$, while diffusion processes predominate when $T \gg T_3$. Orig. art. has: 1 figure

SUB CODE: 111 ORIG REF: 002/ OTH REF: 008/ SUBM DATE: none

Card

2/2 CC

21390
14,2110

S/194/61/000/009/047/053
D271/D302

AUTHOR:

Afanesenko, B.I., Bartashevskiy, Ye.L. and Kolomoytsev, F.I.

TITLE:

Measuring dielectric characteristics of low-loss liquids by means of a waveguide cell

PERIODICAL:

Referativnyy zhurnal. Avtomatika i radioelektronika, no. 9, 1961, 62, abstract 9 I362 (Nauchn. soobshch. Dnepropetr. inzh.-stroit. in-t, 1960, no. 60, 8 pp., ill.)

TEXT:

A brief survey of methods for measuring dielectrics in the microwave region. A method is considered for measuring liquids by a waveguide section with an adjustable short-circuiting stub. The stub makes it possible to vary the length of the section and the volume of liquid. Parameters of the investigated liquid, ϵ and $\tan \delta$ are calculated on the basis of readings of the indicator belonging to the measuring line, inserted between the generator

Card 1/2

ACC NR: AT6028991

SOURCE CODE: UR/0000/66/000/000/0278/0283

AUTHORS: Kolomoytsev, F. I.; Bartashevskiy, Ye. L.

ORG: none

TITLE: Varying the parameters of noncoupled ferrite phase inverters by an additional thermal treatment

SOURCE: Vsesoyuznoye soveshchaniye po ferritam. 4th, Minsk. Fizicheskiye i fiziko-khimicheskiye svoystva ferritov (Physical and physicochemical properties of ferrites); doklady soveshchaniya. Minsk, Nauka i tekhnika, 1966, 278-283

TOPIC TAGS: ferrite, magnetic loss, magnetic property, q factor

ABSTRACT: The effect of additional thermal treatment on the magnitude of the phase shifts and on the introduced losses in noncoupled ferrite phase inverters was studied. Three different ferrite compositions were used. The specimens were sintered at 1000--1200°C for 4 hours and allowed to cool naturally in the furnace to room temperature. The experimental procedure followed was described earlier by K. Kalikstein, N. Cooper, and J. Troy (Proc. IRE, 50, No. 9, 2025, 1962). A schematic of the experimental arrangement of the specimen in the waveguide is presented, and the experimental results are summarized in graphs and tables (see Fig. 1). It was found that the variation of the characteristic parameters of ferrites by additional thermal treatment offers new possibilities for improving the properties of ferrites working at ultrahigh frequencies.

Card 1/2

ACC NR: AT6028991

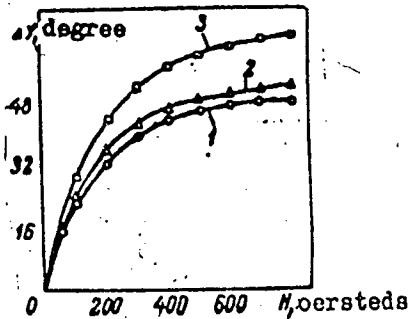


Fig. 1. Dependence of noncoupled phase shift on the thermal treatment (magnesium-chromium ferrite). 1 - before treatment; 2 - after treatment in air with slow cooling; 3 - after repeated annealing in air and subsequent quenching

Orig. art. has: 2 tables and 4 graphs.

SUB CODE: 09, 11/ SUBM DATE: 22Dec65/ ORIG REF: 007/ OTH REF: 005
20/

Card 2/2

ACC NR: AT6028992

SOURCE CODE: UR/0000/66/000/000/0290/0296

AUTHOR: Bartashevskiy, Ye. L.

ORG: none

TITLE: On the problem of loss in ferrites at ultrahigh frequencies

SOURCE: Vsesoyuznoye soveshchaniye po ferritam. 4th, Minsk. Fizicheskiye i fiziko-khimicheskiye svoystva ferritov (Physical and physicochemical properties of ferrites); doklady soveshchaniya. Minsk, Nauka i tekhnika, 1966, 290-296

TOPIC TAGS: ferrite, magnetic loss, dielectric loss, magnetic property

ABSTRACT: The magnetic and electric losses incurred in $MgAl_{0.3}Fe_{1.7}O_4$ and in $MgCr_{0.3}Fe_{1.7}O_4$ ferrites at ultrahigh frequencies of the applied field were determined as a function of the thermal treatment and porosity of the specimen. The determinations of the tensor components μ and μ_α and the complex dielectric permeability ε^* were carried out after the method of V. V. Nikol'skiy (Radiotekhnika i elektronika, 1, No. 5, 638, 1956). The Q-factor was determined after the method described in Tekhnika izmereniy na santimetrovyykh volnakh, ch. 1. pod. red. G. A. Remeza Izd. Sov. radio, M., 1949. The experimental results are summarized in graphs and tables (see Fig. 1). It was found that the character and magnitude of the losses in both types of ferrites were practically identical. The magnetic losses in steady fields in the region of 0

Card 1/2

ACC NR. AT6028992

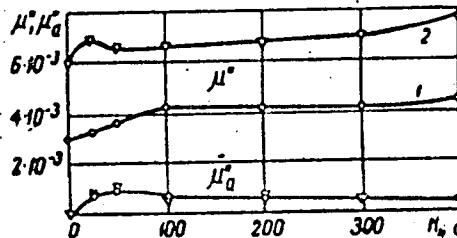


Fig. 1. Dependence of μ'' and μ'_α on the magnitude of the steady magnetic field for aluminum-magnesium ferrite, and the rate of cooling after thermal treatment in air. 1 - slow cooling; 2 - fast cooling -- quenching

to 400 oersteds increased in the majority of cases as a result of further thermal treatment of the specimens. The electrical losses were found to be caused by the conductance losses, and their magnitude depended on the concentration of divalent iron ions in the ferrites. Orig. art. has: 2 tables and 2 graphs.

SUB CODE: 11, 09/ SUBM DATE: 22Dec65/ ORIG REF: 008/ OTH REF: 004
20/

Card 2/2

BARTASHEVSKIY, Ye.L. [Bartashev's'kiy, Ye.L.]; KOLOMOYTSEV, F.I.
[Kolomaitsev, F.I.]; KOREL'SKIY, A.F.; POKORNIISKIY, A.Ye.
[Pokorel'skiy, A.F.]; SIVISIN, D.S.; YAKUNIN, A.Ya.
[Iakunin, O.IA]

Relationship between saturation magnetization and the parameters
of ferrites used in the superhigh-frequency technique. Ukr.
fiz. zhur. 8 no.8 1994, p.99. Lj. '93. (MIRA 16:11)

1. Dnepropetrovskiy gosudarstvenny universitet.

AFANASENKO, B.I.; BARTASHEVSKIY, Ye.L.; KOLOMOYTSEV, F.I.; VORONIKOV, N.I.,
otsent, etv. za vypusk

[Using a water wave nucleus to measure the dielectric characteristics
of liquids] Izmerenie dielektricheskikh kharakteristik malopoternykh
zhidkostei s pomoshch'iu volnovodnoi iacheiki. Dnepropetrovsk,
1960. 8 p. (Dnepropetrovsk. Inzhenerno-stroitel'nyi institut.
Nauchnoe soobshchenie, no.60). (MIRA 16:8)

1. Zamestitel' direktora Dnepropetrovskogo inzhenerno-stroitel'nogo
instituta po nauchnoy rabote (for Voronkov).
(Liquids—Electric properties)

L 33435-66 EWT(1) IJP(c)
ACC NR: AP6013458

SOURCE CODE: UR/0139/66/000/002/0043/0050

AUTHOR: Bartashevskiy, Ye. L.; Kolomoytsev, F. I.ORG: Dnepropetrovsk State University (Dnepropetrovskiy gosuniver-
sitet)TITLE: Effect of heat-treatment conditions on the electrical con-
ductivity of super-high-frequency magnesium-base ferrites

SOURCE: IVUZ. Fizika, no. 2, 1966, 43-50

TOPIC TAGS: electric conductivity, ion concentration, superhigh fre-
quency, magnesium, ferrite, ~~heat treatment~~ METHYL HEAT TREATMENTABSTRACT: The electrical conductivity of aluminum-magnesium, magne-
sium-chromium, and magnesium -manganese ferrites has been investigated.
Electrical conductivity measurements were carried out by the d-c two-
electrode method at temperatures -30— + 300C. The effect of measure-
ment conditions (materials, method of electrode application, and moist-
ure in the surrounding medium) on the results obtained was analyzed.
Measurements were made of the temperature curve of the electrical con-
ductivity relative to the ferrite heat-treatment conditions (tempera-
tures of preliminary and final annealings, atmospheres of the supple-

Card1/2

L 33435-66

ACC NR: AP6013458

mental heat treatment, and the cooling rate). The bivalent iron content was determined in some samples. Measurement results show that the values of the specific electrical conductivity and of the activation energy of conductance are determined by the ion concentration in bivalent iron. The authors thank F. F. Kodzhesspirov and A. Ya. Yakunin for valuable discussions. Orig. art. has: 5 figures, 4 formulas, and 3 tables.

SUB CODE:II,20 / SUBM DATE: 01Jun64/ ORIG REF: 010/ OTH REF: 005

Card 2/2 ULR

BARTASHOV, I.

Introduction smelting of secondary metals. NTO 2 no.11:37 N
'60. (MIRA 13:11)

1. Zamestital' nachal'nika tekhnicheskogo otdela upravleniya
metallurgicheskoy promyshlennosti Mosoblsovnarkhoza.
(Aluminum--Electrometallurgy)

DROZDOV, G.V.; KLEBANSKIY, A.L.; BARTASHOV, V.A.

Preparation of perfluoroacyloxy derivatives of biscyclopentadienyl-titanium. Zhur. ob. khim. 32 no. 7:2390-2391 Jl '62. (MIRA 15:7)
(Titanium organic compounds)

BARTASHVILI, I. B.

BIEZHANT, V. N. and BARTASHVILI, I. B.

Issledovaniye professorov poluzashchitym vysokomolibdostogo manganesa.

report submitted for the 5th Physical Chemical Conference on Steel Production,
Moscow, 30 Jun 1959.

PROKOPCHIK, A. Yu. [Prokopcikas, A.]; BARTASHYUNAS, Yu.M. [Bartasiunas, J.]

Catalytic disintegration of chlorites. Pt. 2. Disintegration of sodium
chlorite in the presence of nickel and cobalt hydroxide. Liet ak
darbai B no.1:133-143 '61. (EEAI 10:9)

1. Institut khimii i khimicheskoy tekhnologii Akademii nauk Litovskoy
SSR i Vil'nyusskiy gosudarstvennyy pedagogicheskiy institut.

(Chlorites) (Sodium chlorite) (Nickel hydroxide)
(Cobalt hydroxide)

PROKOPCHIK, A. Yu. [Prokopcikas, A.]; BARTASHYUNAS, Yu.M. [Bartasiunas, J.]

Catalytic decomposition of chlorites. Pt.4: The mechanism of reaction. Trudy AN Lit. SSR. Ser. B no.1:141-151 '62
(MIRA 17:8)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR i Vil'nyusskiy gosudarstvennyy pedagogicheskiy.institut.

BABTAYA, R.A.

"Measure of the Spectral Absolute Magnitudes of Werk Stars of the Type B5-A7."
Sub 1^oDec 51, Moscow Order of Lenin State University M.V. Lomonosov.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SD: Sum. №. 420, 9 May 55.

BARTAYA, R. A.

Bartaya, R. A.

"Determining absolute spectral magnitudes of weak stars of types B5-A7."
R. A. Bartaya. Reviewed by V. V. Arsent'yev. Astron. zhur. 29 No. 4, 1952.

Monthly List of Russian Accessions. Library of Congress, November 1952. UNCLASSIFIED

PIKAYA, N. [A.]

Stars, New

Observations of novae at the Astronomical Observatory, Institute of Astron., No. 130, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

BARTAYA, R.A.

Study of a nova in the constellation Ophiuchus (N Ser 1948) discovered at Abastumani Observatory. Biul. Abast. astrofiz. obser. no.15: 17-32 '53. (MLRA 7:10)
(Stars, New)

BARTAYA, R.A.

Determining absolute spectral magnitudes of weak stars of types B5 -
A7. Biul. Asest. astrofiz. obser. no. 15:17-32 '53. (MLRA 7:10)
(Stars--Spectra) (Stars--Magnitudes)

BARTAYA, R.A.

USSR/Astronomy - Spectroscopy

Card 1/1 Pub. 43 - 10/97

Authors : Kalandadze, N. B., and Bartaya, R. A.

Title : Spectral determinations of absolute magnitudes of faint stars at the Abastumansk Astrophysics Observatory

Periodical : Izv. AN SSSR. Ser. fiz. 18/2, 249-251, Mar-Apr 1954

Abstract : The results obtained during spectral determination of absolute maxima of faint stars are briefly reported. The authors measured the intensity of three spectral bands with centers of about $\lambda = 4200, 4176, 4155$, the intensity of which was compared with the constant intensity of a continuous spectrum between lines $\lambda = 4215$ and 4226 . The intensity was determined by the characteristic curves plotted by means of a 6-stage slot on a slotted spectrograph. The Balmerline absorption was used as a basis for the determination of absolute magnitudes of faint stars of the B5 : A7 subclass.

Institution : The Astrophysics Observatory, Abastumansk, Georg-SSR

Submitted :

BARTAYA, R.A.

Absolute spectral magnitudes of 137 stars of spectral types B8 and B9
located in high galactic latitudes. Biul. Abast. astrofiz. obser. no. 18:
3-12 '55. (MLRA 9:1)

(Stars--Magnitudes)

KHARADZE, Ye.K., akademik; BARTAYA, R.A.

Studying spectral characteristics of stars in regions of diffuse
emission nebulae and star clusters. Soob. AN Gruz. SSR 21 no.1:
29-35 Jl '58. (MIRA 11:10)

1. Abatumanskaya astrofizicheskaya observatoriya. 2. AN GruzSSR
(for Kharadze).

(Stars--Spectra)

BARTAYA, R.A.

Catalogue of absolute spectral magnitudes of 766 spectroscopic
B- and A-type stars in 44 Kapteyn areas situated along the galactic
belt ($|b| \leq 30^\circ$). Biul. Abast. astrofiz. obser. no. 22:25-43 '58.

(MIRA 11:12)

(Stars--Catalog)

81456

3.1560

SOV/35-59-8-6314

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959,
Nr 8, pp 30 - 31

AUTHORS: Kharadze, Ye.K., Bartaya, R.A.

TITLE: Spectral Classification of ²Stars in Several Regions of Con-
stellations Sagittarius, Cygnus and Cepheus, and Around the
Clusters TrI and NGC 6913

PERIODICAL: Astron. tsirkulyar, 1958, May 26, Nr 192, pp 11 - 13

ABSTRACT: The authors performed the spectral classification and deter-
mination of photographic stellar magnitudes within the range
from 9^m to 12^m in several regions of the Milky Way and around
the clusters TrI and NGC 6913. The study is a part of an
extended investigation of the Milky Way regions with diffuse
emission nebulae, which was carried out in the Abastumani Ob-
servatory with a 70-cm meniscus telescope and a 70-cm lens
prism. The following regions were investigated:

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81456

SOV/35-59-8-6314

Spectral Classification of Stars in Several Regions of Constellations
 Sagittarius, Cygnus and Cepheus, and Around the Clusters TrI and NGC 6913

Nr in the KRAO Atlas	α 1950	δ 1950	l	b	Constellation
18	18 ^h 12 ^m	-12°00'	346°.2	+0°.2	Sagittarius-Scutum
31	20 30	+46 18	52 .1	+3 .3	Cygnus
32	20 26	+46 48	49 .2	+2 .0	"
33	20 42	+41 00	49 .4	-1 .7	"
37	21 09	+59 36	65 .9	+7 .7	Cepheus

Four hundred stars were classified in Region Nr 18, of which 61 stars belonged to classes O-B2. The spectrum-visual magnitude diagram indicates the presence there of an O-association. In each of Region 31, 32, 33 and 37, from 500 to 600 stars were classified. In the first one only three B2-B3 stars were discovered, in the second and third - only one B0-B2 star in each, and in the latter - not a single star of a class earlier than B3 was found. Nine hundred

Card 2/3

31456

SOV/35-59-8-6314

Spectral Classification of Stars in Several Regions of Constellations Sagittarius, Cygnus and Cepheus, and Around the Clusters TrI and NGC 6913

stars were classified around the TrI cluster, of which 45% belonged to the classes B9 and earlier, and 7 stars to O - B2 classes. The presence of an O-association in this region is presumed. Fifteen hundred stars were investigated around the NGC 6913-M29 cluster, of which 34% stars were of the O-B9 classes and 174 stars were of the O-B2 classes. Apparently it was an eastern boundary of the stellar association around P Cyg.

N.P. Kukarkina

Card 3/3

81459

3.1430

SOV/35-59-8-6326

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959,
Nr 8, pp 32 - 33AUTHORS: Kharadze, Ye.K., Bartaya, R.A.TITLE: On the Average Distance Between Neighboring Stars in Chains
Consisting of Bright Stars

PERIODICAL: Astron. tsirkulyar, 1958, August 26, Nr 194, pp 20 - 21

ABSTRACT: The photographs of five celestial regions obtained with a 70-cm
meniscus telescope of the Abastumani Observatory were processed.
Three of the nine chains of bright stars noticed by M.A.
Vashakidze may be considered as being physically connected.
This is indicated by the fact that they are of similar spectral
classes, almost equal luminosity, and, in two cases, equal proper
motions of stars in those chains. Main data pertaining to
the stars of these chains are presented. The separations of
stars in one of these chains turned out to be 11 - 12 parsec,
on the basis of absolute stellar magnitudes determined by L.S.
Galkin with allowance for interstellar absorption. Separations

Card 1/2

31459

SOV/35-59-8-6326

On the Average Distance Between Neighboring Stars in Chains Consisting of Bright Stars

in the two other chains amount, on the average, to 35 parsec, as determined from the absolute stellar magnitudes obtained by S.P. Apriamashvili from the Abastumani spectra. The authors adopt 15 - 35 parsec as the average separation between the neighboring stars in the stellar chains of the given type.

N.B. Perova

Card 2/2

KHARADZE, Ye.K.; BARTAYA, R.A.

Spectra of stars around NGC6604, NGC6913 and Trl. Biul.Abast.-
astrofiz.obser. no.26:35-79 '61. (MIRA 15:3)
(Stars, Spectra)

BARTAYA, R.A.; KHARADZE, Ye.K.

Spectra of stars in four segments of diffuse emitting nebulas.
Biul. Abast. astrofiz. obser. no.28:161-203 '62. (MIRA 16:7)
(Stars—Spectra)

BARTAYA, R.A.

Excess short-wave radiation in the spectrum of FU Orionis.
Astron.zhur. 39 no.1:159-161 Ja.-F '62. (MIRA 15:2)

1. Abastumanskaya astrofizicheskaya observatoriya AN Gruzinskoy
SSR.

(Stars, Variable---Spectra)

KHARADZE, Ye.K.; B. [?]; N. [?]

Spectrophotometric investigation of the antigen. Biol. Abstr.
astrofiz. obser. no.31;3, " '64. (MIRA 17:5)

I. Ottovisovannyj i bader zhurnale Issled. voprosov po astrofizicheskoy obserwatsii i drug. Kharadze.

S/081/62/000/012/004/063
B168/B101

AUTHORS: Bartczak, Tadeusz, Gałdecki, Zdzisław

TITLE: Crystalline structure of compounds of alkaline metal halides with halides of trivalent antimony and bismuth. I. The elementary cell and space group of $K(BiBr_4) \cdot H_2O$

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 34, abstract 12B213 (Zesz. nauk. Politechn. Łódzka, no. 36, 1961, 11 - 13)

TEXT: The crystals of $K(BiBr_4) \cdot H_2O$ were synthesized, analyzed chemically and subjected to X-ray examination (Laue, rotation and $\lambda Cu-K$ methods). Parameters of rhombic lattice: a 8.79, b 12.76, c 22.70 Å, Z = 16, q(measured) 4.48, q(calculated) 4.55, group: Pnан. [Abstracter's note: Complete translation]

Card 1/1

L 05324-07 10.10.83
ACC NR: AP7000232 (N)

SOURCE CODE: PO/0099/66/040/002/0341/0342

BARTCZK, T. and GALDECKI, Z., of the Department of Inorganic Chemistry,
Polytechnic Institute (Katedra Chemii Nieorganicznej Politechniki),
Lodz.

34

13

Crystal Structure of Rubidium Heptachlorodiantimonite $RbSb_2Cl_7 \cdot H_2O$
and Rubidium Heptachlorodibismuthite $RbBi_2Cl_7 \cdot H_2O''$

Warsaw, Roczniki Chemii, Vol 40, No 2, 1966, pp 341-342.

Abstract: The crystals of $RbSb_2Cl_7 \cdot H_2O$ and the isotypic $RbBi_2Cl_7 \cdot H_2O$ are monoclinic. The unit cells contain 4 molecules. No piezoelectric effect was observed. The space group is $C_{2h}^5 - P2_1/c$. The structure of the heptachlorodibismuthate was determined using common and differential two-dimensional Patterson syntheses and two-dimensional electron density projections. The authors thank Professor E. Jozefowicz for encouraging interest.

JPRS: 36,002J

TOPIC TAGS: rubidium compound, organoantimony compound, organobismuth compound, electron density, crystallograph

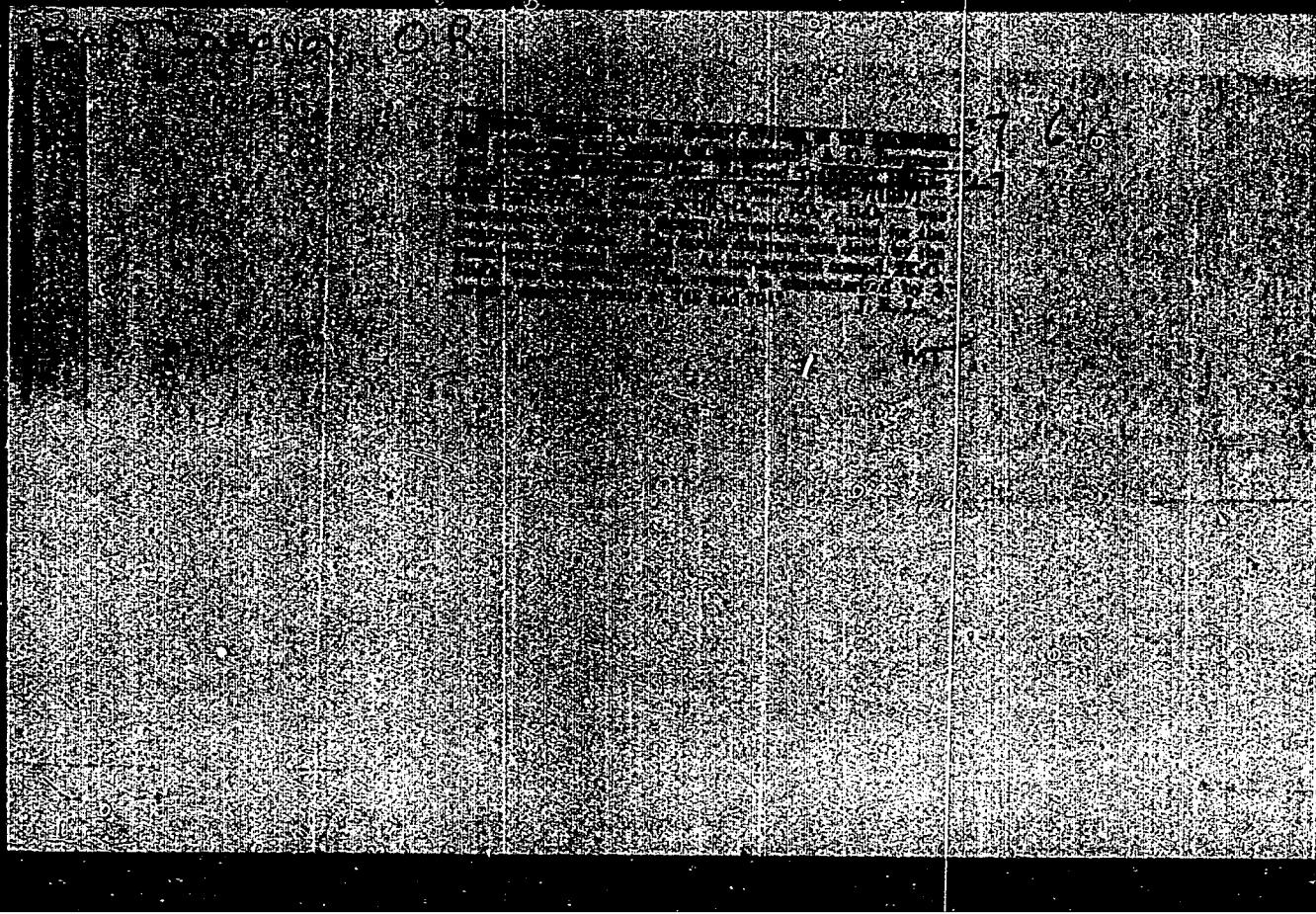
SUB CODE: 20,07 / SUBM DATE: 04 Nov 65 / ORIG REF: 002 / OTH REF: 001
KH

Card 1/1

0703 0767

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203720015-1



APPROVED FOR RELEASE: 06/06/2000

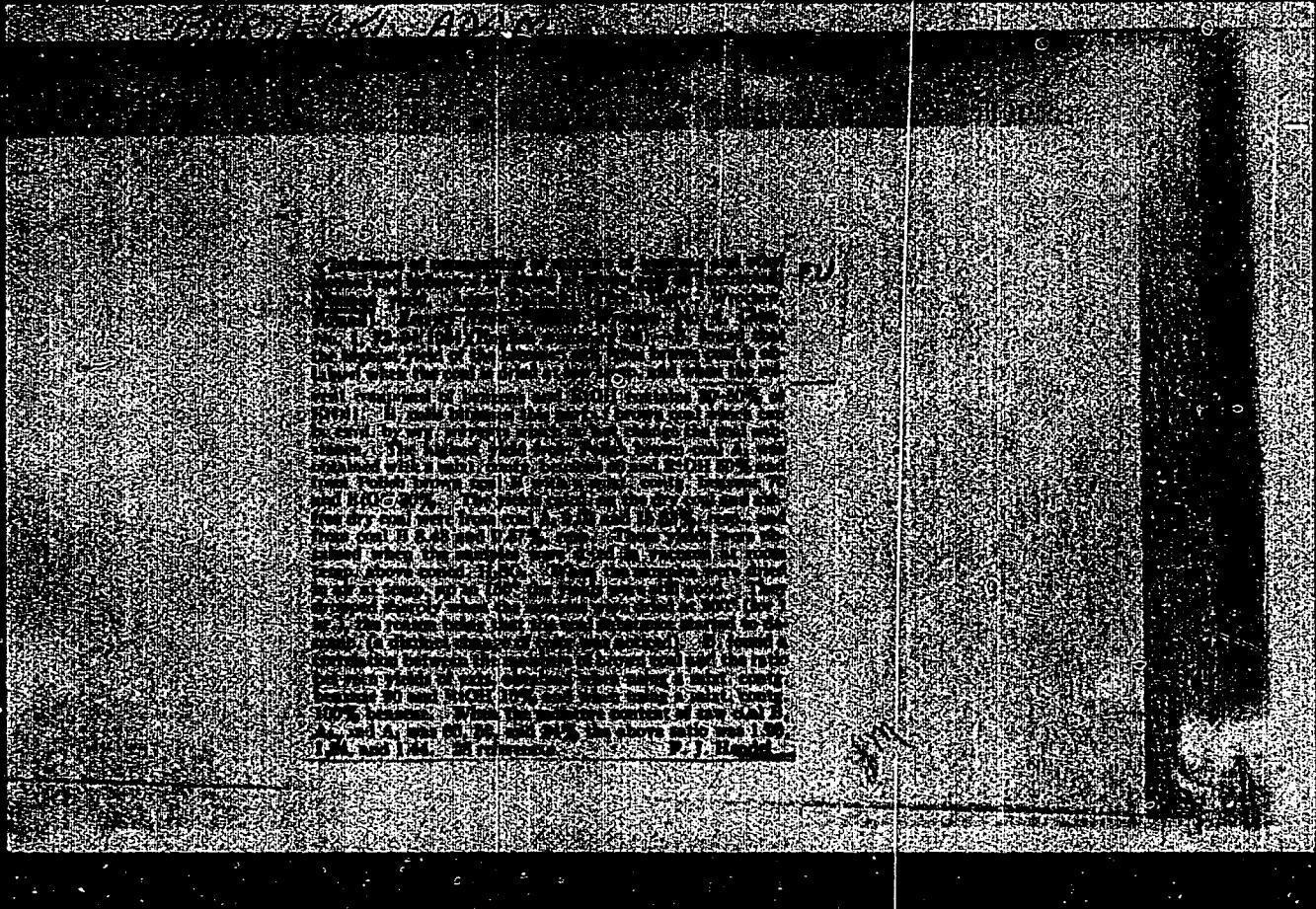
CIA-RDP86-00513R000203720015-1"

BARTCZAK, Nikodem, mgr inz.; CYBUSLSKI, Stanislaw, mgr inz.

Water and sewage management in the public administration of
transportation. Gosp wodna 23 no. 8/9:328-331 Ag-S '63.

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203720015-1



APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203720015-1"

BARTEKI, Adam

POLAND / Chemical Technology, Chemical Products and Their
Application, Part 3. - Treatment of Solid Combustible
Minerals.

H-22

Abs Jour : Ref Zhur - Khim., No 14, 1958, No 47974

Author : Bohdan Karczon, Adam Barteksi.

Inst : Wroclaw Polytechnical Institute

Title : Brown Coal Bitumine as Natural Resinous-Waxy Substances.

Orig Pub : Katedra Technologii Węgla Politechniki Wrocławskiej, Wied.
chem., 1955, 9, No. 2, 65 - 84.

Abstract : A classification of natural waxes and resins is presented.
The properties, chemical composition and methods of winning raw mineral wax are discussed. The description of mineral wax free of resin is given, methods of its purification and the properties of the pure product are given. The spheres of brown coal wax and resin utilization are presented. Bibliography with 66 titles.

Card 1/1

15

JEZOWSKA-TRZEBIATOWSKA, B.; BARTECKI, A.; CHMIELOWSKA, M.

The potassium permanganate-stannous chloride system in acetone. Bul
Ac Pol chim 7 no.7:485-490 '59. (EEAI 10:4)

1. Department of Inorganic Chemistry, Wroclaw Technical University.
Institute of Physical Chemistry, Polish Academy of Sciences.
Presented by W.Trzebiatowski.

(Acetone) (Potassium permanganate) (Tin chlorides)
(Systems (Chemistry))

<i>B7K 10001 A.</i>		
Country	: Poland	
Category	: Inorganic Chemistry - Complex Compounds	
ABP, No.	: 120000, No. 10	C
Author	: Jemiołowska-Trzeciakowska, E., Bartosik, A.*	
Institut.	: Not given. <i>Chemia Fizyczna i Materiałów</i>	
Title	: Investigation of the Chemistry of Hexavalent and Quadrivalent Uranium in Organic Solvents	
Orig Pub.	: Nukleonika, 3, Spec No. 4-5, (1958)	
Abstract	: The authors have investigated the behavior of $\text{UO}_3(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ (I) in organic solvents ($\text{C}_2\text{H}_5\text{OH}$, acetone, methyl ethyl ketone, methyl isobutyl ketone, acetylacetone, 1,4-dioxane, acetonitrile, formamide, butyllismamilphosphates) by the methods of spectrophotometry, solubility, and electric conductivity. It is shown that I is a very weak electrolyte in organic solvents. The absorption spectra (300-500 m μ) of I in the above-indicated organic solvents are described; all of the spectra	
Card:	1/4 *Trzywarska, H., Camielowska, M., Skalicki, T., Lukietynska, K., and Zukowicz, J.	

Country	:	Poland
Category	:	Inorganic Chemistry - Complex Compounds.
Abs. Jour	:	Izvzhiv., No 13, 1959
Author	:	
Institut.	:	
Title	:	
Ori. Int.	:	
Abstract	:	show a marked fine structure. The authors also discuss the formation of complexes involving I and molecules of organic solvents. The kinetics of the photochemical formation of $\text{UO}_4 \cdot 2\text{H}_2\text{O}$ (II) in ether solutions of I saturated with water when a stream of O_2 is passed through the solution at 25° and the latter is irradiated with light from a mercury lamp. The following mechanism is proposed for the formation of II which under the conditions indicated follows zero-order kinetics:
Card:	2/4	

Country	: Poland	C
Category	: Inorganic Chemistry - Complex Compounds	
Ass. Jour	: Rch. Khim., No 13, 1969	45333
Author	:	
Institut.	:	
Title	:	
Orig. Rub.	:	
Abstract	$\text{RCH}_2\text{OCH}_2\text{R} + h\nu \longrightarrow \text{RCH}_2\text{O} + \text{CH}_2\text{R}$ $\text{RCH}_2\text{O} + \text{O}_2 \longrightarrow \text{nCH}_2\text{O}_2$ $\text{RCH}_2\text{O}_2 + \text{UO}_2(\text{NO}_3)_2 \longrightarrow \text{RCH}_2\text{O}-\text{UO}_2(\text{NO}_3)_2$ $\text{RCH}_2\text{O}-\text{UO}_2(\text{NO}_3)_2 + 3\text{H}_2\text{O} \longrightarrow \text{II} + \text{RCH}_2\text{O} + 2\text{HNO}_3$ $2\text{RCH}_2\text{O} \longrightarrow \text{RCH}_2-\text{O}-\text{O}-\text{CH}_2 \xrightarrow{k} \text{RCH}_2 + \text{RCH}_2\text{O}$ (R = CH, CH(CH ₃)CH ₂ , CH ₃)	
	The spectrophotometric method was used in the investigation of solutions of UCl ₄ in CH ₃ OH and in tributylphosphate (TBP). The spectra of UCl ₄ in nonaqueous solutions are more complex than	

Card: 5/4

Country	:	Poland
Category	:	Inorganic Chemistry - Complex Compounds.
Obs. Year	:	RZhKhim., No 13, 1959
Author	:	
Institut.	:	
Title	:	
Orig. Ref.	:	
Abstract	:	the spectra of aqueous solutions containing U(IV) (the number of bands is greater and their splitting is increased). Possible assignments of the bands are discussed. UCl ₄ in THF forms a complex of composition of UCl ₄ ·THF; the logarithm of the constant for the formation of the complex is 5.13. Yu. Aharitonov
Card:	4/4	

BARTECKI A

POLAND/Optics -- Spectroscopy.

K

Abs Jour : Ref Zhur Fizika, No 1, 1960, 2154

Author : Jezowska-Trzebialska, B., Bardecki, A.

Inst : *Bart. Inorgan. Chem.*
The University, Wroclaw; Institute of Physical
Chemistry, Polish Academy of Sciences.

Title : The Absorption Spectra of Uranyl Nitrate in Some
Organic Solvents

Orig Pub : Bull. Acad. polon. sci. Ser. sci. chim., geol. et
geogr., 1958, 6, No 9, 567-574, IL-L

Abstract : Absorption spectra were measured of solutions of
hexahydrate uranyl nitrate in water (I), dioxane (II),
acetone (III) methyl ethyl ketone (IV), methyl isobutyl
ketone (V), tributyl phosphate (VI), aceton nitryl (VII),
formamide (VIII) and acetyl acetone (IX)
in the range from 360 to 500 millimicrons. The

Card 1/3

POLAND/Optics - Spectroscopy.

K

Abs Jour : Ref Zhur Fizika, No 1, 1960, 2154

spectrum of solutions I -- VIII consists of a broad-band with a clearly pronounced vibrational structure and, apparently, corresponds to the forbidden transition of the electrons of the add: end on the 5 f orbit of uranium. The position of the maxima of the vibrational bands and the corresponding coefficients of absorption ϵ (mole⁻¹ cm⁻¹ liter) are tabulated. In III -- VIII the vibrational structure is less sharply pronounced than in I -- II, and a bathochromic shift occurs in the vibrational bands by approximately 10 millimicrons. The similarity between spectra I -- VII shows that in the solution, the uranyl nitrate exists in the form $UO_2(H_2O)_4 \cdot (NO_3)_2$ or

$[(UO_2(H_2O)_4(NO_3)_2)]$, where the nitrate groups can be partially replaced by molecules of the solvent.

Card 2/3

- 129 ..

PCLAND/Optics - Spectroscopy.

K

Abs Jour : Ref Zhur Fizika, No 1, 1960, 2154

Judging from the considerable increase in ϵ , a stronger complex with the solvent is formed in VIII, and the formamide crowds out the water from the coordination sphere (in VIII $\epsilon = 29.85$, whereas its values in II, III, and VI are 8.2, 11.13, and 9.74 respectively). The spectrum of IX does not have a vibrational structure and consists of two broad bands at 400 and 453 millimicrons with $\epsilon = 580$ and 260 respectively. The difference from the spectra of the other solutions is ascribed to the formation of a chelate complex, where the bond U-IX has a partially covalent character. -- D. Suglobov

Card 3/3

BARTECKI, Adam; CHMIELOWSKA, Maria; JEZOWSKA-TRZEBIATOWSKA, Boguslawa

Inorganic compounds in acetone. Pt. 1. General characteristics
of non-aqueous solvents, properties and purification of acetone.
Pt. 2. Durability of acetone against the effect of supermangan.
Przem chem 39 no.4:210-218 Ap '60.

1. Katedra Chemii Nieorganicznej, Uniwersytet i Politechnika, Wroclaw
i Instytut Chemii Fizycznej, Polska Akademia Nauk, Wroclaw.

BARTÓCKI, Adam, dr., inż., adiunkt

Research on the luminous flames of certain natural solid fuels. Pt. 1.
A photoelectric method of research on the luminous phenomena. Pt. 2.
Model and kinetics of the luminous phenomena. Pt. 3. Structure and
propagation of the flames. Chemia Wrocław no. 7:87-160. '61

1. Katedra Chemii Nieorganicznej II, Politechnika, Wrocław.

BARTEC'I, Adam; JEZOWSKA-TRZEBIAT'WSKA, Boguslawa

Vibrational structure of electronic spectra of uranyl nitrate. Pt. 1.
Force constants and U-O distances in organic solvents. Nukleonika 6
no. 4:267-275 '61.

1. Politechnika, Wroclaw, Katedra Chemii Nieroganicznej II i Instytut
Chemii Fizycznej PAN.

JEZOWSKA-TRZEBIATOWSKA, Boguslawa; BARTECKI, Adam

The vibrational structure of electronic spectra of uranyl nitrate.
Pt.2.: The dissociation energy of uranyl ion. Nukleonika 6 no.4:
277-285 '61.

1. Politechnika, Wroclaw, Katedra Chemii Nierorganicznej II, Instytut
Chemii Fizycznej Polskiej Akademii Nauk.

JEZOWSKA-TIZELBATOWSKA, Boguslawa; BARTECKI, Adam

The vibrational structure of electronic spectra of uranyl nitrate.
Pt. 3.: Transition intensities in the spectra of uranyl nitrate.
Nukleonika 6 no.4:287-294 '61.

1. Politechnika, Wroclaw, Katedra Chemii Nieorganicznej II.

S/081/62/000/019/001/053
S144/B180

AUTHORS: Jedowska-Trzebiatowska, V., Bartoszki, A.

TITLE: The solvent effect in absorption spectra of uranyl nitrate

PUBLISHER: Referativnyj zhurnal. Khimiya, no. 19, 1962, 13, abstract 1936 (Bull. Acad. polon. sci. Ser. sci chim., v. 9, no. 2, 1961, 67 - 70 [Eng.; summary in Rus.])

TEXT: The effect of organic solvents on the absorption spectra ($\sim 360 - 500$ nm) of uranyl nitrate (I) solutions is discussed on the basis of experimental data obtained previously. In the spectra of I solutions the mean lifetime of one the components of the vibrational structure of the electron transition bands is $\sim 7 \times 10^{-4}$ sec; it is related to the frequency ν_3 of the symmetrical stretching vibration of the UO_2^{2+} ion. The solvents cause variations in the energy of the vibrational transitions, the intensities of the absorption bands, and in the vibrational structure of the electron transition bands. No direct relation was found between variations in ν_3 and the dielectric constant or dipole moment of the solvents. It is suggested that the vibrational structure of the electron transition bands Card 1/2

The solvent effect ...

5/0.1/0.2/0.3/019/021/025
B1...A/B1B2

of the Cu^{2+} ion. I. P. ... on the one hand between these ions and the molecules of the solvent, on the other of spectra of I in organic solvents are discussed: 1) without fine-ionic structure (covalent bond); 2) with partially covalent structure (with a marked extent covalent); 3) with partially ionic structure (predominantly of the ionic-dipole type); 4) with clearly defined fine structure (and mainly ionic). [Substracter's note: complete transcription.]

*Inst. Phys. Chem. Wroclaw Section,
Polish Acad. Sci.*

B. rdi

BARTECKI, A.

"Absorption spectra in the ultraviolet visible region" edited
by I.Lang. Vol. 2. Reviewed by A.Bartecki. Wiad chem 16
no.1:62-63 Ja '62.

BARTECKI, Adam, dr. inz., adiunkt

Problems and achievements of Hungarian science in the field
of spectroscopy. Wiad chem 16 no.5:285-298 My '62.

1. Katedra Chemii Nieorganicznej II, Politechnika,
Wroclaw.

JEZOWSKA-TRZEBIATOWSKA, B.; BARTECKI, A.; KEDZIA, B.

Molecular spectroscopy of anhydrous uranyl salts. III. Bul chin
PAN 10 no.8:433-438 '62.

1. Department II of Inorganic Chemistry, Technical University,
Wroclaw. Presented by W. Trzebiatowski.

BARTECKI, A.

Activites of the Main Executive Board of the Polish Chemical Society. Wiad chem 18 no. 2: 129-131 F '64.

I-9595-66 EMP(+) / T/EWP(+) / EWP(b).
ATT NR: AP6002227

LIP(c) LD/LG/RM

SOURCE CODE: CZ/0043/65/000/003/0161/0166

AUTHOR: Bartekci, A.

ORG: Department of Chemistry of Rare Elements, Technical University, Wroclaw, Poland

TITLE: Chemistry of MoO_2 sub 2 sup n plus oxycation compounds [Paper presented at the Symposium on the Structure and Properties of Coordinated Compounds held in Bratislava from 2 to 4 September 1964]

SOURCE: Chemicke Zvesti, no. 3, 1965, 161-166

TOPIC TAGS: molecular spectroscopy, chromium compound, molybdenum compound, intermolecular complex, vanadium compound, coordination chemistry

ABSTRACT:

By molecular spectroscopy it was shown that in CrO_2X_2 chromyl compounds, the CrO_2^{2+} group exhibits features of an oxycation group. Individual characteristics depend on the nature of bond with remaining X. Chromyl compounds react differently with hydrocarbons when chromyl group is attached to a chloride than when it is attached to an acetate. Data concerning $\text{Mn}(\text{VI})$ complexes containing an Mo_2 group are presented; MoO_2Cl_2 , MoO_2Br_2 , and complexes with acetyl acetone, 8-hydroxyquinoline, and triphenylarsenic oxide are discussed. Results of investigation with the vanadyl group VO_2 are discussed. Light absorption phenomena are evaluated. Orig. art. has: 3 tables. [JPRC]

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 006 / OTH REF: 004

Form 1/1

BARTECKI, JAN.

Bartecki, Jan. - Kształcenie politechniczne i problematyka planu szesięciioletniego w nauczaniu fizyki. Opracowali: Jan Bartecki, Czesław Fotyma i Konstanty Lech. [Wyd. 1.] Warszaw, Państwowe Zakłady Wydawn. Szkolnych, 1952. 115 p. [Polytechnical education and problems of the Six-Year Plan in the teaching of physics]

SO: Monthly List of East European Accessions, L.C., Vol. 3, No. 4, April, 1954

KWIATKOWSKI, Julian; RAKOWSKI, Jerry

Design and utilization of extraction apparatus for continuous extraction of sodium aluminate from sinter. Problemy proj hut maszyn 12 no.10;289-296 0 '64.

1. Bipomet, Trzebinia.

ZADROZNY, Marian, mgr ins.; BARTECKI, Piotr, mgr ins.

221.5 m of cross heading during 1 month in the 1 Maja mine. Wiadom
gorn 14 no.2/3:49-53 F-Mr '63.

BANKA, Marian, mgr inz.; BARTECKI, Piotr, mgr inz.

Possibilities of improving separated ventilation for mine construction works in the Rybnik Coal District. Wiadom gorn 14 no.5:147-149 My '63.

FIEBIG, Adolf; BARTECZKO, Izabella; STECHNIJ, Irena

Studies on methods used in pharmaceutic practice for the increase
of microbial contamination of drugs. Acta pol. pharm. 28 no.5:435-
440 '61.

1. Z Zakladu Farmacji Stosowanej Akademii Medycznej w Gdansku
Kierownik: dr A. Fiebig i z Apteki Panstwowego Szpitala Klinicznego
Nr 1 w Gdansku Kierownik: mgr J. Lewonowa.
(DISINFECTION) (DRUGS)

BARTEL, E.

6
Phenol-formaldehyde ion exchangers. II. Influence of the ratio of phenol to formaldehyde on the properties of cation of the phenolsulfonic acid condensed in an acid medium. Feliks Polak and Edgar Bartel (Univ. Jagiellonki, Poland). *Premysl Chem.* 31, 631-7 (1958) (English summary); *C.A.* 52, 8417d.—The condensation reaction of *p*-phenolsulfonic acid with HCHO in an acid medium can be controlled when the process is carried out to the gelling point at ambient temp. Thus, the exchange capacity and the swelling coeff. of the cationite is controlled. The S content and the no. of sulfonic groups in the ion exchanger decreases with decreasing ratio of phenol to HCHO. The swelling coeff. depends largely on the content of the sulfonic groups. The main factor responsible for splitting sulfonic groups during condensation is HCHO. The ratio of phenol to HCHO influences the yield of the resin. 20 references. F. LeHandel

6
Raining
4E2c (j)
2-1E3C
4E3d

POLAK, H.; RERICHA, Vl.; KLESTIL, Fr.; BARTEJS, J.

Volumetric and morphological changes in blood cells of workers employed in mining and processing of radioactive raw materials. Prac. lek. 14 no.9:413-420 N '62.

1. Ustav hygieny prace a prevence chorob z povolani, Jachymov.
(URANIUM) (MINING) (BLOOD CELLS)
(OCCUPATIONAL DISEASES)

CHODOSTOV / LIT.

POLAK, M.; JEMNIK, V; KUBALA, A; NEJEDLA, J; KLESKIL, P;
TAMÍČEK, J; HVALDOVÁ, B.

Institute of Public Health (LÉTUV. ASTRONIHO SARAVI),
Jáchymovské doly (for all)

Prague, praktický lekár, No 16, 1963, p 628

"The Study of Morphological and Functional Condition of
Blood and Marrow Elements of the Workers in the
Jáchymov Mines."

67

BARTEK, A. BOHUS, I.

Portable mine transformer stations which cannot cause explosions. p. 235.

UMLJ (Ministerstvo paliv) Praha, Czechoslovakia. Vol. 1, No. 7, July 1959

Monthly List of East European Accesions (EEAI) LC, Vol. 9, No. 1, Jan. 1960
Uncl.

L 34159-66 EWP(t)/ETI IJP(c) JD

ACC NR: AP6026035

SOURCE CODE: CZ/0034/66/000/003/0164/0168

AUTHOR: Hotloch, Zdenek (Engineer); Myslivec, Theodor (Engineer; Candidate of sciences); Bartek, Bretislav (Engineer)ORG: Klement Gottwald Vitkovice Iron Works, Ostrava (Vitkovicka zelezarny KG)

TITLE: Facts about manufacture of semikilled steels for strips

SOURCE: Hutnické listy, no. 3, 1966, 164-168

TOPIC TAGS: steel, metallurgic furnace, rimmed steel, shot blasting, metal casting, metallurgic process, metallurgic industry

ABSTRACT: The steel is made in a 70 t fixed open hearth and a 250 t tilting furnace by a process commonly used for rimming steels. Deoxidation was carried out by Al shot addition during the bottom casting process, about 1-1.5 minutes before the end of casting; 3½ to 4¼ t ingots were cast. Blooms were tested ultrasonically to determine optimum amount of Al. The homogeneous surface layer is 20-30 mm at the bottom, 15-20 mm at the top. 50-90% of occluded substances are aluminates. The improved process of deoxidation reduced drastically the amount of substandard product. The proportion of semikilled steel strip increased from 20.4% in 1962 to 54.8% in 1965. The amount of substandard product was lower in semikilled steel production than in rimming steel. Orig. art. has: 13 figures and 3 tables.

[Based on author's Eng. abst.] [JPRS: 36,646]

SUB CODE: 11, 13, 05 / SUBM DATE: none / ORIG REF: 004

Cord 1/1 [] IDC: 669.141.241.3

MYSLIVEC, Theodor; MOTLOCH, Zdenek; BARTEK, Bretislav

Experience with the production of semi-killed steel for thick plates. Hut listy 17 no.7:462-471 Jl '62.

1. Vitkovicke zelezarny Klementa Gottwalda, Ostrava.

NOSEK, J.J.; BARTEK, J.

Cancer treatment. Cas.cesk.lek.Ved.priloha 63 no.9-12:264-265
Dec 1950. (CIML 20:9)

1. Of the Institute of Medical Chemistry of Palacky University,
Olomouc.

PARTEK, J.

Czechoslovakia DA: 47:12.37

with F. SAMAVY

Palacky Univ., Olomouc, Czech.

"Isolation of substances from the tubers of Clerodendron superba, v. rothschildiana, and C. simplex."

Pharmazie 7, 595-9 (1952).

BARTEK, J.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Electrochemistry

Polarography of alkaloids XVII. Contribution to the polarography of quinolines and its derivatives. I. Bartek, M. Černoch, and P. Šantavý. (Palackého Univ., Olomouc, Czech.) *Chem. Listy* 47, 461-3 (1953); *cl. C.A.* 46, 11592c.

In acid media, quinolone is reduced in a 2-electron step, but in neutral and alk. media, a 4-electron change is noted. Quinolone gives single 2-electron wave over the full pH range. Quinolone behaves like quinone. XVIII. Polarography and tautomerism of cotarnine and related substances. Emil Čeufalík and František Šantavý. *Ibid.* 1009-10.

In acidic medium, hydristamine, cotarnine, berberine, and related substances were reduced at the quaternary double bond. In alk. medium, in addn. to the wave corresponding to the reduction of quaternary double bond, a wave corresponding to the reduction of the open, aldehydic form was found. The carbinol form (pseudobase) could be supposed to exist only in alc. KOH soln. or with large excess of alkali; it was always accompanied with the reducible aldehydic form. The ultraviolet spectra described for berberine and cotarnine in alk. medium corresponded not only to the carbinol form but also to the second tautomeric form. XIX. Polarography of chelecythrine and sanguinarine. Josef Bartek and František Šantavý. *Ibid.* 1017-20. Chelecythrine and sanguinarine give in acid medium 2 one-electron waves; in neutral medium 1 two-electron wave. This wave corresponds to reduction at more neg. potentials than the potentials of the waves in acid medium. M. Hudlický

BARTEK, J.

Cadmium intoxication. Vl. Mašák, M. Černoch, J.
Bartek, D. Wiedermann, and F. Santavý. *Lékařské Listy*
9, 27-30 (1954).—The authors believe that in intoxications
of this type (and possibly other heavy metals) the body
does not suffer any damage through the coupling of heavy
metals with SH groups of glutathione. The heavy metals
are probably combined with other groups in the human body
by means of more labile coupling and therefore it is possible
to carry out the detoxication in a rather simple way, i.e.
by means of cysteine or British antilewisite.

O. E. Lobstein

Bartek, J.

WECG

Lynn

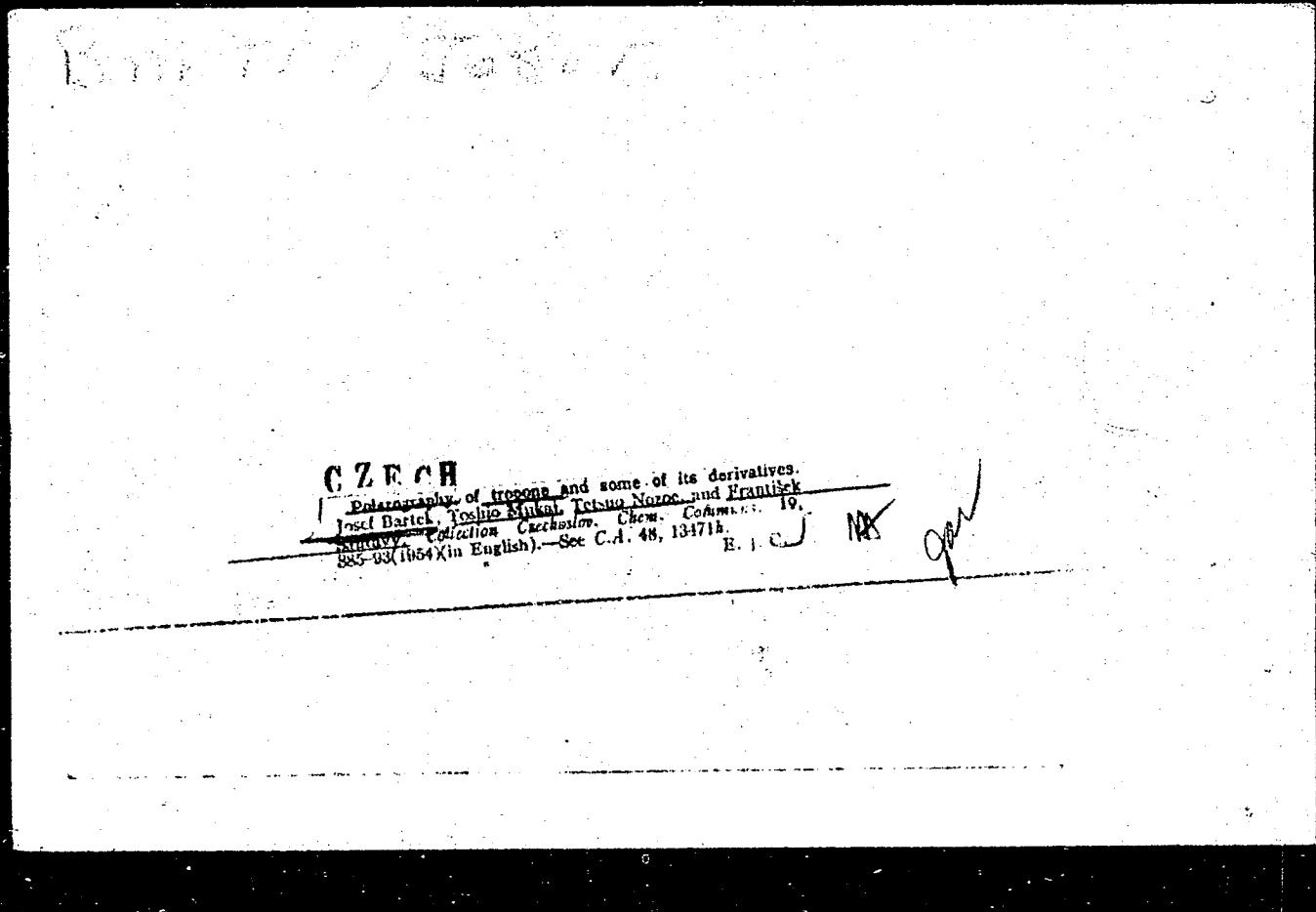
Pavlin, J.; Sova, A.; and Vl, F.

"Micrography of alkalis. VII. Contribution to the micrography of sodium and its derivatives." p. 366, (Chemical and physical analysis of organic substances, 1954, English translation, vol. 19, no. 3, June 1954, Praha, Czechoslovakia)

See monthly list of int. Scop. Accesories, 1954, no. 4, No. 5, May 1955, Incl.

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203720015-1



APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203720015-1"

BARTEK, J.

CZECH

Constitution of α - and β -peltatin. J. Bartek and F. Šaněk
Javří (Palackého Univ., Olomouc, Czechoslovakia) *J. Chem. Listy*
48, 917-19 (1963).—The Hartwell (*C.A.* 45, 1083d) formula
for α -peltatin is favored on the basis of OM₂ and Ac deriv.
Consts. for α -peltatin-B are given: m. 275°, [α]_D 35°.
 Ac deriv. , m. 263°, [α]_D -10°. In addn., a new compd.,
m. 302-6° (decompn.) [Ac deriv. , m. 273-5° (decompn.)].
was isolated from *Podophyllum peltatum*. M. Hudlický

RSC

Polarography of tropone and some of its derivatives.
J. J. Vojtěch, Zdeňka Nekolášková, Tetsuo Natori, and František
ŠEBESTÝ (Palackého Univerzita Olomouc, Czech.). Chem.
Listy 45 1123-1131 (1954). Tropone (I), *p*-phenyltropone
(II), *p*-nitrotropone (III), colchicamide (IV), *N*-acetyl-*O*-*β*-D-glucoside (V), and methyl deriv. of colchicine (VI) were
subjected to polarographic and oscillographic investigation.
I, II, and IV gave in acidic and neutral solns. 2 two-electron
waves. Tropolone, V, and VI in acidic medium represented
a two-electron reduction. At certain pH values the polaro-
graphic behavior of IV corresponded to 8-electron reduction.
Tropones (tunobutol, thufapicol, colchicine, colchicine
mer. reduced irreversibly at potentials closer to those of their
Bz/H derivs. Tropone showed reversible reduction during
oscillographic investigation. M. Hudlický

5-1-11, 2+

Bartek, J., and others. Polarography of tropone and some of its derivatives.
p. 1123. CHEMICKÉ LISTY. Praha. Vol. 48, no. 9, Aug. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 11,
Nov. 1955, Uncl.

(14)

Isolation of some compounds of resin podophylli (*Podophyllum peltatum*) and contribution to their structure. Jindřich Bartek, Helena Počádková, Vlasta Mašínová, and František Santavy (Pražského Univ., Olomouc, Czech). *Chem. Listy* 49, 1550 (9/1955) — From resin podophylli, the following compounds were isolated (the Me and Ac derivs. were prep'd as indicated below): *gueratina*, m. 316-18° (*Ac* deriv., m. 184-8°); a mixt. of *podostearins*, m. 140-2°, $[\alpha]_D^{25} - 35.0^\circ$, $[\alpha]_D^{30} - 38.7^\circ$; *podophyllotoxin*, m. 115-17°, $[\alpha]_D^{25} - 131^\circ$, $[\alpha]_D^{30} - 132^\circ$; α -*peltatin-A* (I), m. 240-3°, $[\alpha]_D^{25} - 123^\circ$; β -*peltatin-1* (II), m. 210-2°, $[\alpha]_D^{25} - 120^\circ$, $- 122^\circ$; *picropodophyllin*, m. 235-7°, $[\alpha]_D^{25} 9^\circ$, a compd. (P-1), m. 303-5°, (*Ac* deriv., m. 273-5°, $[\alpha]_D^{25} 0^\circ$); a compd. (P-2), m. 220-2°; *diacetylidenethylpicropodophyllin*, m. 204-6°, $[\alpha]_D^{25} 30^\circ$; *tetraacetyl-4-O-(β-D-glucopyranosyl)picropodophyllin*, m. 208-3°, $[\alpha]_D^{25} - 3^\circ$; α -*peltatin-II* (III), m. 270-8°, $[\alpha]_D^{25} 45^\circ$; β -*peltatin-B* (IV), m. 212-14°, $[\alpha]_D^{25} 41^\circ$; *acetylpicropodophyllin*, m. 211°, $[\alpha]_D - 141^\circ$; *acetylpicropodophyllin*, m. 218°, $[\alpha]_D 29^\circ$; *diacetyl deriv.* of I, m. 232°, $[\alpha]_D - 117^\circ$; *di-Me ether* of I, identical with Me ether of II, m. 164°, $[\alpha]_D - 120^\circ$; *di-Ac deriv.* of III, m. 204°, $[\alpha]_D - 10^\circ$; $[\alpha]_D^{25} - 12^\circ$; *di-Me ether* of III, identical with Me ether of IV, m. 185°, $[\alpha]_D 10^\circ$; *Ac deriv.* of II, m. 231°, $[\alpha]_D - 125^\circ$; *Ac deriv.* of IV, m. 223°, $[\alpha]_D - 6^\circ$. Metaylations were carried out with an ether soln. of CH_2N_2 , acetylations by heating 12 hrs. at 60° with Ac_2O and AcOK . The results agree with structures proposed by Schrecker and Hartwell (*C.A.* 49, 3132*b*) and contradict the structures of Press and Prun (*C.A.* 49, 3130*a*). M. Hullicky

(3)

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CZECHOSLOVAKIA/Physical Chemistry - Electrochemistry.

B-12

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 20798

Author : Frantisek Santavy, Bela Jambor, Alice Nemeckova, Jiri Mollin, Josef Bartek.

Title : Influence of Various Substitutes in 2 Position on Polarographic Reduction of Tropone.

Orig Pub : Chem. listy, 1957, 51, No 4, 704-708

Abstract : The substitutes in the position 2 cause a shift of $E_{\frac{1}{2}}$ of tropone in the following order ($E_{\frac{1}{2}}$ of the 1st wave according to the st. c. e. at pH 0 and the number of electrons attached at pH 2.7 and 5.8 are presented): Cl (-0.530; 6; 8); Br (-0.535; 6; 8); H (-0.680; 2; 4); phenyl (-0.740; 2; 4). In the case of colchicine derivatives, the shift is observed in the following series: $N(CH_3)COCH_3$ (-0.530; 1; 2); $N(CH_3)_2$ (-0.600; 1; 2); $OCOCH_3$ (-0.630; 1; 2); $OCOC_6H_5$ (-0.646; 1; 2); $NHCOCH_3$ (-0.648; 1; 2); OCH_3 (-0.780; 1; 2); OC_2H_5 (-0.784; 1; 2); $NHCH_3$ (-0.830; 4; 4); NH_2 (-0.850; 2 - 3; 4); OH (-0.860; 1; 2). 2 electrons are attached at the reduction (R) in the case of pseudoaromatic tropolones. It is assumed that R takes place at the double bond. The R mechanism was compared with the reduction mechanism of unsaturated aliphatic ketones. Reduction of two double bonds in the nucleus is assumed in the cases of tropone and 2-phenyl-tropone, as well as of 2-amino- and 2-methylaminoanalogues of colchicine, where R proceeds at higher pH with the addition of 4 electrons. In the authors' opinion, also the keto-group and the haloid atom are reduced besides the double bonds in the case of halogen derivatives.

TIHON, E.; BARTEK, J.; SKUHERSKY, K.

Hormonal therapy of exudative pleurisy. Cas. lek. cesk. 98 no.36:
1123-1130 4 Sept 59

1. Tuberkulosni oddeleni Okresniho ustava narodniho zdravi v Uh.
Hradisti, prednosta primar MUDr. Emanuel Tibon . Centralni laboratori
Okresniho ustava narodniho zdravi v Uh. Hradisti, prednosta primar
MUDr. Josef Bartek.

(HORMONES, ther.)
(PLEURISY, ther.)

L 44118-66 EWP(w)/EWP(j)/I WW/RM

ACC NR: AP6005485 (A) SOURCE CODE: CZ/0078/66/000/001/0010/0010

AUTHOR: Bures, Jiri (Engineer; Brno); Bartek, Ladislav (Engineer; Brno)
Havlicek, Jiri (Engineer; Brno) 27
B

ORG: none

TITLE: Highly conductive organometallic compounds, CZ Pat. No. PV 7233-61

SOURCE: Vynalezy, no. 1, 1966, 10

TOPIC TAGS: organonickel compound, organocopper compound, electric conductivity

ABSTRACT: An Author Certificate has been issued for a highly conductive material made of amalgamated nickel or copper particles in either stick, chip, or powder form, bonded with an agent with low conductivity. The weight-percentage ratio of metallic particles may range from 40—99%, that of mercury to 25%, and that of the binder from 0.1—60%. Binders such as polyester resins or nitrocellulose may be used.

SUB CODE: 11, 09/ SUBM DATE: 07Dec61 [KP]

Card 1/1

COUNTRY	:	Czechoslovakia	H-4
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 1959, No. 86914	
AUTHOR	:	Bartek, Zd.	
INST.	:		
TITLE	:	The Problem of Corrosion in Machine Shops	
ORIG. PUB.	:	Jenna mechan. a opt., 1959, 4, No 2, 47-49	
ABSTRACT : A review of problems concerning corrosion of steel parts during their production. The principal sources of incipient corrosion are condensation of water vapor on the surface, contact with human perspiration, and microgeometrical characteristics of the surface. The principal methods of corrosion control are described. Bibliography 5 references. -- D. Vakesh.			
CARD:			

CZECHOSLOVAKIA/Optics - Photometry. Colorimetry.

K

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000203720015-1"

Abs Jour : Ref Zhur Fizika, No 12, 1959, 28712

Author : Bartek, Zdenek
Inst :
Title : Cold Light
Orig Pub : Jema mechan. a opt., 1958, 3, No 9, 308-309

Abstract : Description of various bulbs of fluorescent lamps used in photographic enlargers, which produce the most uniform illumination of the frame.

BARTEK,Z., inz.; MACHACEK, K.; SEKERA, J.

Professional magnifying apparatus Agrand. Jemna mech opt 8
no.9:295-300 S'63.

HARTEK, Z., inz.

Focusing devices of enlarging apparatus. Jamma mech opt
7 no.3:84-87 Mr '62.

1. Meopta, n.p., Prerov.

BARTEK, Z., inz.

Mechanization and automation of dark room operations. Jamma mech
opt 8 no.4; 120-122 Ap '63.

1. Meopta, n.p., Prerov.

BARTEL E.

BARTEL, E. AND OTHERS

Polarographic and spectrophotometric investigation of the reduction process and of the acid-base equilibrium; p-dimethylaminobenzaldehyde and the p-benzaldehyde-trimethylammonium iodide.

P. 13 (Roczniki Chemii) Vol. 7, No. 1, 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. Vol. 7, NO. 1, JAN. 1958

BARTEL, E.

BARTEL, E. AND OTHERS.

Polarographic, potentiometric, and spectrophotometric investigations of the acid-base equilibrium and tautomatism of p-hydroxybenzaldehyde.

P. 27 (Roczniki Chemii) Vol. 7, No. 1, 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN. 1958

BARTEL LEJ. EWA T. BARTEL

POLAND/Analytical Chemistry. Organic Analysis.

E

Abs Jour: Ref. Zhur-Khimiya, No 12, 1958, 39426.

Author : Bartel, Grabovsky, Kemulya, Turnovskaya-Rubashevskaya.

Inst : Not given.

Title : A Polarographic and Spectrophotometric Study of the Reduction Processes and Acid-Base Equilibrium of p-Dimethylamino Benzaldehyde and the Iodide of p-Benzaldehyde trimethylammonium.

Orig Pub: Roczn. Chem., 1957, 31, No 1, 13-26.

Abstract: A study was made on the polarographic reduction and absorption spectra of p-dimethylamino benzaldehyde (DB) and p-benzaldehyde trimethylammonium salts (TBX), where X is chlorine or iodine. The TBI is obtained from DB and ~~SH₂I~~, m.p., 144 degrees Centigrade; picrate, m.p., 168 degrees Centigrade. The solubility of TBI in 96% alcohol

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POLAND/Analytical Chemistry. Organic Analysis.

E

Abs Jour: Ref. Zhur-Khimiya, No 12, 1958, 39426.

is 18.75 g/l. at 20 degrees Centigrade. The curve of the UV absorbance of TBCl in 0.1 M KCl solution has three maxima (λ_{max}) are given successfully in m μ and mol. coeff. of adsorption in mol. $^{-1}$ l.cm $^{-2}$: 240; 15150; 280.7; 1380; 311; 30) and is very near to the curve of benzaldehyde (I) adsorption. In acid solutions TBI is reduced like the (I). At pH 6, a new wave appears after the wave corresponding to the reduction of the aldehyde possibly caused by the breakage of the C-N bond. In acid solution DB produces waves similar to that of (I); in alkaline solutions it produces 2 waves, the height of the first one diminishes with the increase of pH and second one becomes larger. On the basis of the change in heights of the two waves with the change in pH, the value for pK' was

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POLAND/Analytical Chemistry. Organic Analysis.

E

Abs Jour: Ref. Zhur-Khimiya, No 12, 1958, 39426.

found to be 8.2. On the basis of the changes in adsorbance spectrum of DB depending on pH the value for pK_{DBH^+} was found to be 1.82 ± 0.05 . $pK' \geq pK$, hence, the first wave probably corresponds to the reduction of the DBH^+ ion and the second one - of the molecule DB. Prior to the reduction of DBH^+ at $pH > pK$ a rapid reaction of $DB \rightarrow DBH^+$ must take place. According to the Koutezki's equation (R. Zh. Khim., 1955, 3497), a constant of that conversion was found to be abnormally large ($K = 5 \pm 0.2 \cdot 10^{14} \text{ mole}^{-1} \cdot \text{l} \cdot \text{sec}^{-1}$). It proves that the reaction is dependant not only on hydronium ions but on the other proton donors as well which are present in solution.

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BARTEL, E. T.

✓ The polarographic and spectrophotometric study of ρ -aminobenzaldehyde. Wiktor Kemula, Ewa Teresa Bartel, and Wieslawa Rubaszewska (Polish Acad. Sci., Warsaw); Roczniki Chem. 33, 1117-24(1959)(in English); cf. CA 51, 12208d. —A previous polarographic study of ρ -dimethylaminobenzaldehyde (I) revealed the existence of 2 waves at pH 8 which form a system of kinetic recombination currents owing to proton transfer occurring prior to the electrode reduction step. The calcd. value of the recombination rate was abnormally high. The present study of ρ -aminobenzaldehyde (II) was undertaken to det. if this anomaly exists for compds. similar to I. The ultraviolet absorption spectrum of II showed max. at 236 and 320 m μ . A change in pH did not cause a shift in the max. at 320 m μ . The max. at 236 m μ shifted to 245 m μ in acid soln. At the same time ϵ rose from 8170 to 12,600. The increase in ϵ was also observed for I, but no shift occurred. In alk. medium, 2 well-defined polarographic waves were obtained for II analogous to I. With increasing pH the more pos. wave diminished and the more neg. increased. Calcn. of the recombination-rate const. of II yielded a value similar to that of I.

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